

direction of the signal line that has a phase constant of  $\beta$  is represented by the following Equation 1.

Replace the paragraph beginning at page 5, line 25 with:

*B2*  
As Fig. 1 shows, signal lines 4, 5, and 6 are connected in series, the signal line 2 is connected to the node A between signal lines 4 and 5, and the signal line 3 is connected to the node B between signal lines 5 and 6. By adjusting line lengths L1 to L5 and line widths W1 to W5 of the signal lines 2 to 6 shown in Fig. 1, the 2nd harmonic is adjusted to be an open load (the reflected phase angle of  $\Gamma_{in}$ :  $0 - 90^\circ$ , the quantity of reflection:  $0.6 - 1.0$ ), and the 3rd harmonic is adjusted to have a short-circuit load (the reflected phase angle of  $\Gamma_{in}$ :  $110 - 270^\circ$ , the quantity of reflection:  $0.6 - 1.0$ ).

Replace the paragraph beginning at page 6, line 14 with:

*B3*  
According to the First Embodiment, as described above, by adjusting line lengths L1 to L5 and line widths W1 to W5 of the signal lines 2 to 6 in a high frequency power amplifying circuit shown in Fig. 1, the 2nd harmonic can be adjusted to be an open load (the reflected phase angle of  $\Gamma_{in}$ :  $0 - 90^\circ$ , the quantity of reflection:  $0.6 - 1.0$ ), and the 3rd harmonic is adjusted to be short-circuit load (the reflected phase angle of  $\Gamma_{in}$ :  $110 - 270^\circ$ , the quantity of reflection:  $0.6 - 1.0$ ). Therefore, by optimizing the input-side harmonic load of the impedance-matching circuit, the efficiency of transistor operation can be improved.

*IN THE CLAIMS:*

Cancel claims 3 and 4 and replace the indicated claims with:

*B4*  
1. (Twice Amended) A high frequency power amplifier, comprising:  
a transistor for amplifying signals and having an input side; and  
an input-side impedance matching circuit connected between the input side of said transistor and a signal input terminal of the amplifier, wherein said input-side impedance matching circuit provides an impedance of a substantially open circuit load with respect to even number higher harmonics of a fundamental wave of a high frequency signal and comprises a third harmonic reflecting circuit, a second harmonic processing circuit, and a fundamental wave matching circuit, disposed sequentially from the signal input terminal.